Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A method of isolating genomic DNA from a sample, said method comprising (a) contacting said sample with a detergent and a solid support in the absence of any chaotropic agent, the solid support comprising an organic polymer, whereby soluble genomic DNA in said sample is bound to the support in a sequence-independent manner in the presence of the detergent and absence of any chaotropic agent, and (b) separating said support with bound genomic DNA from the sample.

2 - 4 (Cancelled)

5. (Original) A method as claimed in claim 1, further comprising disrupting or lysing structural components or cells in the sample prior to the contacting step.

6. (Original) A method as claimed in claim 1, wherein the detergent is anionic.

7. (Original) A method as claimed in claim 6, wherein the detergent is sodium dodecyl sulphate, or another alkali metal alkylsulphate salt, or sarkosyl.

8. (Original) A method as claimed in claim 1, wherein the concentration of detergent is 0.2 to 30% (w/v).

9. (Original) A method as claimed in claim 1, wherein the detergent is contained in a composition additionally comprising one or more monovalent cations, chelating agents or reducing agents.

10. (Original) A method as claimed in claim 1, wherein the detergent is used in alkaline solution.

11. (Original) A method as claimed in claim 1, wherein the solid support is particulate.

12. (Original) A method as claimed in claim 11, wherein the solid support comprises magnetic beads.

13. (Original) A method as claimed in claim 1, wherein the solid support has a hydrophobic surface.

14. (Previously presented) A method as claimed in claim 1, wherein the genomic DNA is eluted from the support, following separation from the sample.

15. (Previously presented) A method as claimed in claim 14, wherein the genomic DNA is eluted by heating.

16. (Previously presented) A kit for isolating genomic DNA from a sample, the kit comprising superparamagnetic polystyrene beads and one or more detergents.

17. (Original) A kit as claimed in claim 16, further comprising one or more buffers, salts, lysis agents, chelating agents and/or reducing agents.

18. (Cancelled)

19. (Original) A method as claimed in claim 1, wherein the organic polymer is polyurethane.

20. (Original) A method as claimed in claim 1, wherein the organic polymer is polystyrene.

21. (Original) A method as claimed in claim 1, wherein the organic polymer is latex.

22. (Original) A method as claimed in claim 1, wherein the solid support comprises superparamagnetic polystyrene beads.

23. (Original) A method as claimed in claim 1, wherein the solid support is porous.

24. (Previously presented) A method as claimed in claim 1, the method further comprising the step of detecting, hybridizing, amplifying or quantifying the bound genomic DNA after the separating step.

25. (Previously presented) The method of claim 5, wherein the disrupting step is effected by one or more of grinding, heating, or alkaline lysis, of the sample.

26. (Cancelled)

27. (Previously presented) A kit for isolating genomic DNA from a sample, the kit comprising (a) a solid support as defined in claim 1; (b) one or more detergents; and (c) instructions for isolating genomic DNA according to the method of claim 1.

28. (Previously presented) A method of isolating RNA and genomic DNA from a sample, said method comprising (a) contacting said sample with a detergent and a solid support in the absence of any chaotropic agent, the solid support comprising an organic polymer, whereby soluble genomic DNA in said sample is bound to the support in a sequence-independent manner in the presence of the detergent and absence of any chaotropic agent; (b) separating said support with bound genomic DNA from the sample; and (c) isolating RNA from said sample.

29. (Previously presented) A kit for isolating RNA and genomic DNA from a sample, the kit comprising (a) superparamagnetic polystyrene beads; (b) oligo dT beads; and (c) one or more detergents.

30. (Previously presented) A kit for isolating RNA and genomic DNA from a sample, the kit comprising (a) a solid support comprising an organic polymer; (b) one or more detergents; and (c) instructions for isolating RNA and genomic DNA according to the method of claim 28.

31. (Previously presented) A method of isolating genomic DNA from cells in a sample, said method comprising (a) obtaining cells from said sample by immunomagnetic separation; (b) producing a lysate by contacting said cells with a detergent and a solid support in the absence of any chaotropic agent, the solid support comprising an organic polymer, whereby soluble genomic DNA in said lysate is bound to the support in a sequence-independent manner in the presence of the detergent and absence of any chaotropic agent; and (c) separating said support with bound genomic DNA from said lysate.

32. (Previously presented) A method as claimed in claim 31, wherein said cells are in a cell:bead complex.

33. (Previously presented) A method of isolating RNA and genomic DNA from cells in a sample, said method comprising (a) obtaining cells from said sample by immunomagnetic

separation; (b) producing a lysate by contacting said cells with a detergent and a solid support in the absence of any chaotropic agent, the solid support comprising an organic polymer, whereby soluble genomic DNA in said lysate is bound to the support in a sequence-independent manner in the presence of the detergent and absence of any chaotropic agent; (c) separating said support with bound genomic DNA from said lysate; and (d) isolating RNA from said lysate.

34. (Previously presented) A method as claimed in claim 33, wherein said cells are in a cell:bead complex.